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TMX1 antibody - C-terminal region
Rabbit Polyclonal Antibody
Catalog # AI14893

Specification

TMX1 antibody - C-terminal region - Product Information

Application	**WB**
Primary Accession	Q9H3N1
Other Accession	NM_030755, NP_110382
Reactivity	**Human, Pig, Horse, Bovine, Dog**
Predicted	**Human, Horse, Bovine, Dog**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**31kDa KDa**

TMX1 antibody - C-terminal region - Additional Information

Gene ID 81542

Alias Symbol	**DKFZp564E1962, PDIA11, TMX, TXNDC, TXNDC1**

Other Names
Thioredoxin-related transmembrane protein 1, Thioredoxin domain-containing protein 1, Transmembrane Trx-related protein, TMX1, TMX, TXNDC, TXNDC1

Format
Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

Reconstitution & Storage
Add 50 ul of distilled water. Final anti-TMX1 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

Precautions
TMX1 antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

TMX1 antibody - C-terminal region - Protein Information

Name TMX1 {ECO:0000303|PubMed:37648867, ECO:0000312|HGNC:HGNC:15487}

Function
Thiredoxin domain-containing protein that participates in various redox reactions through the reversible oxidation of its active center dithiol to a disulfide and catalyze dithiol-disulfide exchange reactions (PubMed:11152479, PubMed:37648867). Acts as a key inhibitor of the alternative triglyceride biosynthesis pathway by inhibiting the activity of TMEM68/DIESL at the endoplasmic reticulum, thereby restricting accumulation of triacylglycerol (PubMed:<a

href="http://www.uniprot.org/citations/37648867" target="_blank">37648867). The alternative triglyceride biosynthesis pathway mediates formation of triacylglycerol from diacylglycerol and membrane phospholipids (PubMed:37648867). Acts as a protein disulfide isomerase by catalyzing formation or reduction of disulfide bonds (PubMed:22228764, PubMed:29932915). Specifically mediates formation of disulfide bonds of transmembrane proteins at the endoplasmic reticulum membrane (PubMed:22228764). Involved in endoplasmic reticulum-associated degradation (ERAD) via its protein disulfide isomerase activity by acting on folding-defective polypeptides at the endoplasmic reticulum membrane (PubMed:29932915). Acts as a negative regulator of platelet aggregation following secretion in the extracellular space (PubMed:30425049). Acts as a regulator of endoplasmic reticulum- mitochondria contact sites via its ability to regulate redox signals (PubMed:27502484, PubMed:31304984). Regulates endoplasmic reticulum- mitochondria Ca(2+) flux (PubMed:27502484).

Cellular Location
Endoplasmic reticulum membrane; Single-pass type I membrane protein. Mitochondrion membrane; Single-pass type I membrane protein. Secreted. Note=Predominantly found in the endoplasmic reticulum (PubMed:11152479). Secreted in the extracellular space following thrombin stimulation (PubMed:30425049). Localizes to mitochondria-associated endoplasmic reticulum membrane (MAM); palmitoylation is required for MAM localization (PubMed:22045338, PubMed:27502484, PubMed:31304984).

Tissue Location
Ubiquitous (PubMed:11152479). Highly expressed in kidney, liver, placenta and lung (PubMed:11152479)

TMX1 antibody - C-terminal region - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

TMX1 antibody - C-terminal region - Images

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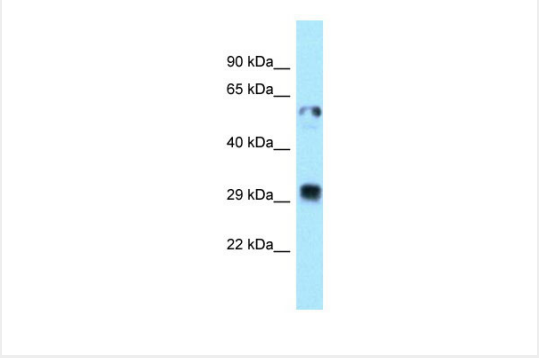

WB Suggested Anti-TMX1 Antibody Titration: 1.0 µg/ml
Positive Control: Fetal Lung

TMX1 antibody - C-terminal region - References

Matsuo Y.,et al.J. Biol. Chem. 276:10032-10038(2001).
Clark H.F.,et al.Genome Res. 13:2265-2270(2003).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Otsuki T.,et al.DNA Res. 12:117-126(2005).
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